

**REMARKS**

Reconsideration of the application and allowance of the pending claims are respectfully requested based upon the remarks below. By this Amendment, claims 1, 9, 19, 21, and 26 are amended, claims 8, 10, 18, 25, and 29 are canceled, and new claim 31 is added. Accordingly, claims 1-7, 9, 11-17, 19-24, 26-28, and 30-31 are pending in this application. No new matter is presented in this Amendment.

Claims 1-5, 7-15, 17, 20-23 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Tserng (U.S. Patent 6,570,608). In addition, claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tserng in view of official notice (MPEP 2144.03). The Office Action further rejects claims 16 and 28 under 35 U.S.C. 103(a) as being unpatentable over Tserng as applied to claim 15 further in view of Cass (U.S. Patent 6,304,674). Based upon the aforementioned amendments to the claims and the following remarks, these rejections are respectfully traversed.

Applicant gratefully acknowledges the indication that claim 18, 19, 29, and 30 contain allowable subject matter. Independent claims 1 and 21 are rewritten to include the allowable subject matter of claims 18 and 29, respectively. Accordingly, claims 1-7, 9, 11-17, 19-24, 26-28, and 30 are allowable and withdrawal of the rejection is respectfully requested.

New independent claim 31 is added and recites, *inter alia*, a method for video analysis and content extraction, comprising the generation of a two-level hidden Markov model (HMM), “wherein the first level HMM includes seven states, and the second level includes a plurality of sub-HMMs, the sub-HMMs being stand alone HMMs; and wherein the sub-HMMs are defined for people, person, and package split or merge interaction.” Applicant respectfully submits that the applied art fails to disclose at least these features of claim 31. Support for claim 31 is provided in paragraphs [0076] – [0081] of the specification.

Of the applied art, only Cass, at column 4, line 9-17, appears to disclose generating a HMM, and only then to facilitate recognition of gestures. Nowhere does Cass disclose a two-level HMM configured to recognize people, a person, and package split or merge interactions, as recited in claim 31. Therefore, Applicant respectfully submit that the applied art fails to disclose

split and merge behavior analysis and understanding using hidden Markov models, as recited in claim 31. Accordingly, claim 31 is distinguished and patentable over the applied art.

All objections and rejections have been addressed. In view of the foregoing, Applicant respectfully submits that the application is in condition for allowance and favorable reconsideration and prompt allowance of claims 1-7, 9, 11-17, 19-24, 26-28, and 30-31 are earnestly solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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**Date: September 7, 2007**  
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